

Newsletter, January 2022

Message from the Chair



Dear CSRG members,

In 2013 I moved back to Canada, after living for over 20 years in the USA where I had stints with big oil before taking on professorships at UT Dallas and the University of Houston. Upon moving back, Carolyn Eyles,

here at McMaster, and Andrew Miall at Toronto organized a welcome back conference to celebrate my return. It was truly an honor that so many of Canada's finest sedimentologists from across our country showed up. Including Guy Plint, Bob Dalrymple, Grant Wach, Daryl Long, Steve Hubbard, and of course, Gerry Middleton, who gave a lovely talk on the history of sedimentology at McMaster.

In 2017 I attended my first GAC/MAC in many decades and wandered into the CSRG meeting where I was rather promptly volunteered by Liz Turner to serve as Vice President. As a grad student at McMaster in the 1980's I attended the inaugural CSRG meeting that Bob Dalrymple organized at Queen's University. Guy Plint played a major role in organizing the CSRG and I was quite thrilled to give my first professional presentation at the inaugural conference. Andrew Miall wrote a review of the conference in Geoscience Canada and mentioned my talk on the Dunvegan Delta. I was so thrilled that he noticed.

So, here I am over 30 years since giving that talk being asked to serve as interim president. It has not been a very productive few years for CSRG mostly due the ravages of the pandemic that never seems to end. We looked at our bylaws to remind ourselves of the process for leadership changes. Martin Ross has ably served us for over four

years and our bylaws require a change. At our last executive meeting, we agreed that Martin would officially resign his position, and that I would take over as interim president. Liz Turner has also stepped down as VP. As a consequence, we are now asking for nominations for both president and vice president.

As interim President, there is not much room for major initiatives, but I will say that there have been and will be some major changes in sedimentology in Canada in the next few years. There have been several recent sedimentology hires in Canada including Dave Lowe at MUN, Paul Durkin at Manitoba, Elli Papangelakis at McMaster, and Liz Steel at Queen's, all of whom I have had the chance to meet (and review some papers and proposals). Andrew Miall has just retired from UT, and we are looking to see who will teach sedimentology there in the coming years and the University of Western Ontario is searching for Guy Plint's replacement following Guy's decision to retire this year. I also see that there have been new hires at Dalhousie and other universities across the country.

I make a presidential promise to reach out to this new community of young promising academic's and do my best to enthuse them in taking an active interest in CSRG. I guarantee you that the future of sedimentology research in Canada is very bright. Canada has long been a world leader in sedimentology, and I would like to do all that I can to ensure that we have an engaged and productive community of scientists and that our legacy of excellence continues.

Janok P. Bhattacharya,
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Nominations for President and Vice-President

We are seeking nominations for President and Vice-President from you, our members. Nominations must be signed by at least two members and must be accompanied by a statement that the nominee is willing to serve. Additional nominations, as deemed appropriate, may be made by the Executive committee, in consultation with non-executive members who are representative of the various regions of Canada.

We are asking for these nominations to be sent to me by email (bhattaj@mcmaster.ca) by March 15th, 2022. Depending on the number of candidates we will then mail ballots to CSRG members with voting to be completed by May 1st. Our annual meeting will be held at the May 15-18th

GAC/MAC in Halifax where we expect to announce the new officers.

Gerard Viner Middleton, FRSC (1931-2021): A Tribute



It is with sadness that we report the recent passing of Gerard V. Middleton, a global leader and pioneer of sedimentology. Gerry Middleton, after whom our distinguished medal is named, was born and raised in southern Africa, and educated in England, obtaining his Ph.D. in geology from Imperial

College in 1954. After a brief stint in the oil industry, he moved to McMaster University in 1955 where he remained for his professional career. Although his doctoral research was on Devonian stratigraphic paleontology, he is best known for a seminal series of papers that documented some of the earliest experimental work on turbidity currents and their deposits (1966-1970) that continues to be widely cited. In shifting from paleontology to sedimentology he was largely self-taught including the complex math required in fluid mechanics and statistics. Together with Monty Hampton, he is responsible for the process-based classification of mass-flow processes that remains the basis of modern thinking in deep water systems. His research interests were extremely diverse, and over the years he published papers on sandstone geochemistry, the diagenesis of carbonates, evaporite solution breccias, the origin of upper-flow-regime parallel lamination, the interpretation of grain-size distributions in sand, tidal sedimentation in the Bay of Fundy, and depositional environments recorded in the Lower Silurian Whirlpool Sandstone that is locally exposed near the base of the Niagara escarpment.

Gerry was a prolific writer of textbooks and short-course notes, reflecting his desire to synthesize and pass on knowledge to others, as well as his reliance on the literature in his own forays into sediment transport. Gerry's most notable textbook, "Origin of Sedimentary Rocks", coauthored with Harvey Blatt and Raymond Murray, appeared in 1972, with a second edition in 1980. This was the first comprehensive textbook to take a rigorous process-based approach to sedimentary geology. Gerry

was also the lead author of the highly influential SEPM Short Course Notes "Mechanics of Sediment Movement" (1977, 1984), and also of "Mechanics in the Earth and Environmental Sciences" (1994). Middleton also returned to his love of statistical methods near the end of his career, organizing short courses on "Nonlinear Dynamics, Chaos and Fractals with Applications to Geological Sciences" (GAC, 1991), and "Nonlinear Dynamics and Fractals: New Numerical Techniques for Sedimentary Data" (SEPM, 1995), and writing the book "Data Analysis in the Earth Sciences Using MATLAB" (2000), all of which he taught himself. Gerry was also the behind-the-scenes instigator of the widely popular text "Facies Models" edited by his long-time colleague and foil, Roger Walker, commissioning the initial series of articles for Geoscience Canada, of which he was the inaugural editor.

For his many important scientific contributions, he was inducted into the Royal Society of Canada in 1970; he was named an Honorary Member of CSPG, IAS, and SEPM; he received the highest award given by both the Geological Association of Canada (GAC)—the Logan Medal (1980), and SEPM, which awarded him both the Pettijohn Medal (1994) and Twenhofel Medal (2003). The Geological Society of London also awarded him the Major John A'Deane Coke Medal in 1995, and the AAPG gave him the Grover E. Murray Memorial Distinguished Educator Award (1998).

Gerard V. Middleton was an innovative researcher, commonly well ahead of the field. He was a profound and deeply critical thinker, a trait that he, together with Roger Walker, instilled in their students. He was passionate about passing on knowledge to others, and his many publications continue to be widely cited because they helped to establish the foundations for our present-day understanding, especially of gravity-flow processes. He was a pioneering giant in our field and he will be sorely missed. For a longer biography, interested readers are directed to Geoscience Canada at <https://journals.lib.unb.ca/index.php/GC/article/view/32635>. He is survived by his wife of 62 years, Muriel, and their three children, Laurence, Teresa, and Margaret, their spouses and Gerry's grandchildren.

The CSPG is sponsoring a session in Gerry's honour at GeoConvention this coming June. If you would like to contribute, abstract submission guidelines can be found at <https://geoconvention.com/call-for-abstracts/>. The deadline for submissions is February 4, 2022.

*Robert W. Dalrymple, Queen's University
Janok P. Bhattacharya, McMaster University*

GAC-MAC Halifax 2022

This year's Joint Annual Meeting of the Geological Association of Canada (GAC) and Mineralogical Association of Canada (MAC) will be hosted in May in Halifax.

Visit <https://halifax2022.atlanticgeosciencesociety.ca/> for all the details.

CSRG General Meeting

We are planning to have a CSRG General Meeting in Halifax for elections of officers, review of financial report, and other business. Details will be emailed in advance of the Meeting to allow for new nominations. Also, please send agenda items ASAP to the Chair bhattaj@mcmaster.ca. Please, let us know if you would like to get involved with the CSRG!

CSRG sponsored sessions

If you have not already, please consider submitting an abstract to one of the sessions at the GAC-MAC meeting. Here is a list of the ones with a focus on sedimentology:

Special Sessions:

SS-18 All Aboard the Glacial Dispersal Train!
Developments in Understanding Areas of Complex Glacial History, a Session in Honour of Dr. Rudolph (Ralph) Stea

SS-21 Evaporites: deposition, deformation, dissolution

SS-22 Sedimentary basins: new approaches and integrated studies

SS-23 Tectonics, stratigraphy, and natural resource potential of rifted continental margins: North Atlantic Ocean and beyond

SS-24 Orogenic processes seen through the sedimentary rock record

SS-25 Deepwater depositional systems: from processes to deposits

We also encourage you to explore the rest of the program as there are also other sessions, short courses and workshops relevant to sedimentology.

Nominations for the 2022 Middleton Medal

DEADLINE for nominations is extended to **February 25, 2022**. Please consider nominating a deserving colleague. Details about the medal can be found here: [Middleton](#)

CSRG Executive and Councillors

Chair (interim): Janok P. Bhattacharya (McMaster)

V-Chair: Vacant

Secretary/Treasurer: Robert Sharp (Consultant)

Past Chair: Martin Ross (Waterloo);

Newsletter Editor: Martin Ross

Regional councillors:

Eastern Canada: Galen Halverson (McGill)

Western and Central Canada: Brian Pratt (Saskatchewan)

If you have created publicly available online resources about sedimentology (e.g., online field trips, lectures, tutorials) during this pandemic, please send us the links; we will be happy to share those resources with the members in the next Newsletters.



Picture 1: Imbricated platy clasts on a beach; western Great Slave Lake, NT (photo by Martin Ross, 2021). Flying dragonfly for scale!



Picture 2: An outcrop of the Devonian Mirage Point Formation on the shore of western Great Slave Lake, NT. The lithology is mostly dolostone with thin shale interbeds with various shades of grey and red with sub-horizontal gypsum "seams". (photo by Martin Ross, 2021, and description by Gideon Lambiv of the NT Geological Survey).